Olin

EAST ALTON, ILLINOIS 62024

May 3, 1983

CERTIFIED MAIL

Mr. William G. Sproat, Jr.
Environmental Scientist
Waste Characterization Branch (WH-565B)
USEPA
401 M St., S.W.
Washington, D.C. 20460

Dear Mr. Sproat:

This letter responds to your letter dated January 21, 1983 requesting additional information regarding Olin's petition to exclude pretreated wastewater from 40 CFR 261.3(a)(2)(ii) and 40 CFR 261.3(c). Our responses to the numbered items in your January 21, 1983 letter are as follows:

1. The volume of sludge present in the Emergency Holding Lagoon is approximately 122 cubic yards. As indicated in our October 8, 1982 submittal of additional information, this sludge has been accumulating since December of 1973. The accumulation rate is therefore less than 14 cubic yards per year.

   The design capacity of the Emergency Holding Lagoon is approximately 1,125,000 gallons (150,000 cubic yards). We would like to re-emphasize that the purpose of the Emergency Holding Lagoon is to provide temporary storage for wastewater which has already gone through initial neutralization and settling in the Wastewater Treatment Plant's Neutralization and Equalization Basins. It was not installed to store sludge.

   The ultimate fate of the sludge in the Emergency Holding Lagoon will be landfill disposal at the Brighton Landfill. The Brighton Landfill is permitted by the State of Illinois (IEPA Site Nos. 11780201 and 11780203). It also has an Interim Status Permit under RCRA (USEPA I.D. No. ILD000667139). The Brighton Landfill is permitted to accept general refuse as well as specifically permitted hazardous and non-hazardous industrial process wastes.

2. The only EP toxicity test results reported in our April 1, 1982 letter were for hexavalent chromium and lead. We do not view the difference from the values previously reported as being significant.

Your question regarding the total chromium leachate concentration in our initial report and the hexavalent chromium leachate concentration in our April 1, 1982 report seems to ask us to explain the relationship of different parameters in different samples, but we can offer the following comments. The hexavalent chromium value reported is not certainely greater than the reported total chromium value. Total Chromium was reported as "0.001 mg/l" while hexavalent chromium was reported as "less than 0.005 mg/l". The reported hexavalent chromium value simply indicates that hexavalent chromium was not detected by the analytical procedure used and that the limit of detection for the procedure is 0.005 mg/l. The value would have been reported the same if the actual concentration were 0 mg/l or 0.004 mg/l. It should be noted that the chromium was analyzed using atomic absorption and the hexavalent chromium was analyzed using a wet chemistry method. The atomic absorption method has a lower limit of detection.

The major difference between the samples for which the EP toxicity test results were reported in our initial submittal and in our April 1, 1982 letter was in the manner in which the samples were collected. As indicated in our October 8, 1982 letter in response to your September 16, 1982 request for additional information, the July 29, 1981 sample was collected with a hand held scoop by scooping up residue from random locations on the bottom of the lagoon. The March 10, 1982 sample was taken using an improved method to insure that the sample taken was representative of the total volume of sludge in the lagoon. An equal number of core samples were taken from 24 equal areas on the bottom of the lagoon.

Olin believes that the different sampling procedures are the major reason for the difference in lead and total cyanide concentrations between the two samples.

3. The variability in the data reported has been explained above. In addition, it should be pointed out that the procedure for collecting the March 10, 1982 sample, as outlined in Olin's October 8, 1982 letter, was selected after telephone discussions between Olin personnel and USEPA personnel. Collection of a single composite sample and dividing it into four separate samples for analysis was specifically discussed with USEPA personnel prior to sampling.

3. (Cont'd)
In view of the above explanation of the variability of results and of the sampling procedures used, we do not believe that additional samples and analyses are warranted.

Please let me know if you have any questions on the information provided in this submittal.

Very truly yours,

L. W. Maxson, Director,
Energy & Environmental Services

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